

WHAT IS CLAIMED IS:

1. A lighting circuit for lighting a vehicular lamp including a light-emitting diode, comprising:

a switching regulator operable to apply an output voltage based on a power-supply voltage received from a DC power supply provided in an outside thereof, to said light-emitting diode to supply a supply current to said light-emitting diode;

an abnormal state detector operable to detect an abnormal state of said lighting circuit based on at least one of said output voltage of said switching regulator, said supply current and said power-supply voltage; and

an output controlling unit operable to control said output voltage of said switching regulator based on said supply current or said output voltage of said switching regulator and to lower said output voltage of said switching regulator in a case where said abnormal state detector detected said abnormal state.

2. A lighting circuit as claimed in claim 1, wherein said vehicular lamp includes n light-emitting diodes connected in parallel, where n is integer equal to or larger than 2,

said abnormal state detector detects breaking of at least one of said n light-emitting diodes as said abnormal state, and

said output controlling unit lowers said output voltage of said switching regulator in a case where said abnormal state detector detected said abnormal state, to reduce said supply current to approximately $(n-1)/n$ times.

3. A lighting circuit as claimed in claim 1, wherein said output controlling unit stops said switching regulator in a case where said abnormal state detector detected said abnormal state.

4. A lighting circuit as claimed in claim 1, wherein said abnormal state detector detects that said output voltage of said switching regulator becomes higher than a predetermined voltage as said abnormal state.

5. A lighting circuit as claimed in claim 1, wherein said abnormal state detector detects that said power-supply voltage changes to a voltage outside a predetermined region as said abnormal state, and

said output controlling unit stops said switching regulator in a case where said abnormal state was detected and resumes said switching regulator in a case where the detection of said abnormal state was stopped.

6. A lighting circuit as claimed in claim 1, further comprising a smoothening capacitor operable to smoothen change of a voltage that is based on at least one of said output voltage of said switching regulator, said supply current and said power-supply voltage, wherein

said abnormal state detector detects said abnormal state based on said smoothened voltage.